

Name: _____ Date: _____ Period: _____

Use the formula for finding the slope and calculate the slope of the lines that exist between the following points:

Example 1: $(-4, 7), (3, -2)$

1) Use Slope Formula, $m = \frac{y_2 - y_1}{x_2 - x_1}$. $m = \frac{-2 - 7}{3 - (-4)} = \frac{-9}{7}$ or $m = -\frac{9}{7}$

2) Choose one of the points $(3, -2)$ and substitute the values of (x, y) with the value of slope into the equation of the line:

$$y = mx + b \text{ becomes } -2 = \frac{-9}{7}(3) + b \text{ and then solve for } b.$$

$$-2 = \frac{-9}{7}(3) + b \quad \text{a. Simplify}$$

$$-2 = \frac{-27}{7} + b$$

$$-2 = -3 + b \quad \text{b. Use Properties of Equality, Add } 3 \text{ to both sides to isolate } b.$$

$$-2 + 3 = -3 + 3 + b$$

$$1 = b$$

c. Rewrite the equation of the line: $y = \frac{-9}{7}x + 1$

1.	$(0, 2)$ $(-3, -2)$

2.	$(3, -2)$ $(6, 2)$

3.	(1,2) (-1,-1)

4.	(-3,-2) (-5,-4)

5.	(10,-2) (5,0)

6.	(-4,0) (0,4)